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09/551,014	04/18/2000	Norbert Roma	940630-010-020	2080

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EXAMINER

POLLACK, MELVIN H

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/551,014

Applicant(s)

ROMA, NORBERT

Examiner

Melvin H Pollack

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *see attached office action*.

DETAILED ACTION

Drawings

1. New corrected drawings are required in this application because many of the lines and lettering appear to be drawn by freehand (Fig. 1, 55-59, Fig. 2 & 3) and because there is insufficient labeling within the drawings themselves (i.e. it is unclear what item #55 is, or what Fig 2 and 3 represent). Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 5, 7, 12, 14, 18, and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are nonstatutory because, instead of describing process method steps, they are drawn to a mathematical function and are thus unpatentable (See MPEP §2106). It is held that one cannot patent abstract formulas, even as part of a larger process.

4. Said claims are also rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. For the claims that list the exponential decay function, there is no limit on "n" to keep r_k from returning an incorrect number. If $n = -1$, there is a division by zero error, and if $n < -1$, r_k becomes a negative number. For the claims that list the

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power law function definition, the problem is similar. If $N = -1$, there is a division by zero error, and if $N < -1$, r_k becomes imaginary.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Schultz (6,208,988).

7. For claim 1, Schultz teaches a method (see abstract) of selecting documents from a data stream (col. 1, lines 5-20), comprising:

- a. Selecting a resource having information comparable to said data stream (col. 1, lines 45-55);
- b. Selecting at least one topic (Fig. 2, #206, 208);
- c. Analyzing said topic against said resource (col. 1, lines 50-55);
- d. Analyzing said topic against said data stream (col. 1, lines 55-67); and
- e. Comparing results from said data stream analysis to results from said resource analysis to select a document from said data stream (Fig. 2, #208, 210).

8. Claims 2, 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Eichstaedt et al. (6,385,619).

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9. For claim 2, Eichstaedt teaches a method (see abstract) of selecting documents (col. 1, lines 5-11) from a data stream (Fig. 2, #58 and #64), comprising:
- a. Selecting a profile (Fig. 2, #62);
 - b. Analyzing a reference corpus of documents against said profile to determine at least one score (col. 1, lines 35-55);
 - c. Scoring at least one document from said data stream against said profile (col. 3, lines 15-25); and
 - d. Comparing said scores from said data stream document to said at least one score from said reference corpus to select said document from said data stream (col. 1, lines 59-62).
10. As for claim 3, Eichstaedt teaches that the method further comprises determining a plurality of reference corpus scores defining a plurality of delivery ratios, and determining a delivery ratio that corresponds to said score from said data stream document to select said data stream document (col. 4, lines 4-30).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eichstaedt as applied to claims 2, 3 above, and further in view of Cook et al. (5,557,227).

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13. For claim 4, Eichstaedt does not expressly disclose that the scores are determined according to an exponential decay function, further defined in claim 5. Eichstaedt does disclose that a decay function of a generic type is used (col. 4, lines 6-8), and that many suitable scoring functions may be used with similar effect (col. 4, lines 15-16). Cook teaches the definition and use (see abstract) of an exponential decay function (col. 1, lines 9-11). At the time the invention was made, one of ordinary skill in the art would have used said function because it is easy to emulate in a computer (col. 1, lines 14-15). Further, the choice of function is a design choice.

14. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eichstaedt as applied to claims 2, 3 above, and further in view of Heckerman et al. (6,529,895).

15. For claim 6, Eichstaedt does not expressly disclose that the scores are determined according to a power law function, further defined in claim 7. Eichstaedt does disclose that a decay function of a generic type is used (col. 4, lines 6-8), and that many suitable scoring functions may be used with similar effect (col. 4, lines 15-16). Heckerman teaches the definition and use (see abstract) of an exponential decay function (Fig. 6a). At the time the invention was made, one of ordinary skill in the art would have used said function because it can be used to model a variety of items in accordance with Zipf's law (col. 10, lines 53-64). Further, the choice of function is a design choice.

16. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schultz as applied to claim 1 above, and further in view of Evans (6,473,755).

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17. Claim 8 is drawn to many of the limitations of claim 1, which Schultz teaches as shown above, but is further drawn to the steps of:

- a. Receiving an information request from a communication network (Fig. 2, #202);
- b. Selecting a data source (see below); and
- c. Transmitting said retrieved documents over said communications network (Fig. 2, #210).

18. Schultz teaches the reading of multiple data sources into a database (Fig. 1, 110 and 112), but does not expressly disclose selecting a data source. Evans teaches the selection of a data source (Fig. 2, 120). At the time the invention was made, one of ordinary skill in the art would have modified Schultz to use multiple databases so as to concentrate documents related by topic for faster processing (col. 5, lines 5-15).

19. As to claims 9-20, they do not teach or define above the correspondingly rejected claims 1-8 and thus claims 9-20 are rejected for the reasons given above.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H Pollack whose telephone number is (703) 305-4641.

The examiner can normally be reached on 8:30-5:00 M-F.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (703)305-4003. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

MHP

11 September 2003



DAVID WILEY
SUPERVISORY PATENT EXAMINER
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